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| APPLICATION NO.     | FILING DATE                               | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------|---|----------------------|---------------------|------------------|
| . 10/820,177        | 04/07/2004                                | Gary D. Anderson     | POU920030211US1     | 7373             |
|                     | 7590 <u>12/26/200</u><br>IENBERG FARLEY & | EXAMINER             |                     |                  |
| 5 COLUMBIA CIRCLE   |   |                      | WILSON, YOLANDA L   |                  |
| ALBANY, NY 12203    |   |                      | ART UNIT            | PAPER NUMBER     |
|                     |   |                      | 2113                |                  |
|                     |   |                      |                     |                  |
| SHORTENED STATUTOR  | Y PERIOD OF RESPONSE                      | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS 12/26/2006 |   | PAP                  | ER                  |                  |

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  | Application No.  | Applicant(s)          |  |  |  |
|--|--|-----------------------|--|--|--|
| Office Action Commons  | 10/820,177   | ANDERSON ET AL.       |  |  |  |
| Office Action Summary  | Examiner   | Art Unit              |  |  |  |
|  | Yolanda L. Wilson  | 2113                  |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sheet with the c                                       | orrespondence address |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |  |                       |  |  |  |
| Status   |  |                       |  |  |  |
| 1) Responsive to communication(s) filed on <u>07 Ar</u>  | oril 2004  |                       |  |  |  |
| · - · · · · · · · · · · · · · · · · · ·  | action is non-final.   |                       |  |  |  |
| , — ·  |  |                       |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |                       |  |  |  |
| Disposition of Claims  |  |                       |  |  |  |
| 4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.  |  |                       |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |                       |  |  |  |
| 5) Claim(s) is/are allowed.  |  |                       |  |  |  |
| 6)⊠ Claim(s) <u>1-27</u> is/are rejected.  |  |                       |  |  |  |
| 7) Claim(s) is/are objected to.  |  |                       |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | r election requirement.  |                       |  |  |  |
| Application Papers   |  |                       |  |  |  |
| 9) The specification is objected to by the Examine   | r.   |                       |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |  |                       |  |  |  |
| Applicant may not request that any objection to the  | drawing(s) be held in abeyance. See                                      | e 37 CFR 1.85(a).     |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |  |                       |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |                       |  |  |  |
| Priority under 35 U.S.C. § 119   |  |                       |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>  |  |                       |  |  |  |
| Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  | 4)  Interview Summary<br>Paper No(s)/Mail Da<br>5)  Notice of Informal P | ate                   |  |  |  |
| Paper No(s)/Mail Date <u>04/07/04</u> .  | 6) Other:  | . <b></b>             |  |  |  |
|  |  |                       |  |  |  |

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#### **DETAILED ACTION**

### Claim Objections

- 1. Claim 27 is objected to because of the following informalities: Claim 27 should recite 'A machine readable storage medium having stored thereon machine readable instructions executable by a machine to perform...'. Appropriate correction is required.
- 2. Claims 12,25 are objected to because of the following informalities: Claim 12 is missing a period at the end of the claim. Appropriate correction is required.

### Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

- 4. Claims 14-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 10 recites 'logic for automatically determining...'. As stated on page 4, paragraph 0015, this logic is software. Therefore, these claims merely recite software per se, which is not permissible under the Examination Guidelines for Computers Related Inventions.
- 5. Claims 22-26 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 10 recites 'means for automatically determining...means for monitoring'. As stated on page 4, paragraph 0015, this is software. Therefore, these claims merely recite software per se, which is not permissible under the Examination Guidelines for Computers Related Inventions.

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## Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 7. Claims 1-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Krishnamurthy et al. (USPN 20040073833A1). As per claim 1, Krishnamurthy et al. discloses providing logic for automatically determining which controller of redundant controllers is active controller, wherein outputs controlled by the redundant controllers are electrically connected together and provided as input to at least one device; and providing a hardware output interlock for the redundant controllers to ensure that output controlled by only the active controller is enabled as input to the at least one device on page 6, paragraph 0056 and Figure 2. The two cards are connected to each other and to the devices they control; therefore, there are two sets of outputs. The drawer cards are the controllers.
- 8. As per claims 2,10,15,23, Krishnamurthy et al. discloses further comprising providing a unique identification for each controller of the redundant controllers, wherein the automatically determining comprises employing the unique identifications to automatically determine which controller of the redundant controllers is active controller on page 6, paragraph 0056.

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9. As per claims 3,16, Krishnamurthy et al. discloses wherein the providing of unique identifications for the redundant controllers comprises providing hardwired identification bits for each controller of the redundant controllers on page 6, paragraph 0056.

- 10. As per claims 4,17, Krishnamurthy et al. discloses further comprising providing logic for monitoring the active controller for possible failure, and upon detection of failure, for automatically switching active control to another controller of the redundant controllers on page 6, paragraphs 0057-0061.
- 11. As per claims 5,11,18,24, Krishnamurthy et al. discloses wherein the monitoring comprises employing a watch dog timer for the active controller of the redundant controllers, and detecting failure of the active controller when the watch dog timer of the active controller expires on page 6, paragraph 0057,0059. The heartbeat check is known to be associated with a timer.
- 12. As per claims 6,12,19,25 Krishnamurthy et al. discloses wherein providing the hardware output interlock includes providing a state machine to enable/disable outputs controlled by each controller of the redundant controllers and ensure that output of only the active controller is enabled as input to the at least one device on page 6, paragraph 0061.

The output to the devices is disabled when a switch occurs.

13. As per claims 7,20, Krishnamurthy et al. discloses further comprising employing a watch dog timer for each controller of the redundant controllers, and providing status of watch dog timer signals from the controllers of the redundant controllers to the state

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machine as input, wherein the state machine employs the status of the watch dog timer signals of the redundant controllers to determine which controller of the redundant controllers to have output enabled for input to the at least one device on page 6, paragraph 0059. These checks are located on each drawer card, see Figure 8.

- 14. As per claims 8,21, Krishnamurthy et al. discloses wherein providing the hardware output interlock includes providing the state machine for each controller of the redundant controllers, and wherein each state machine further employs as input a unique identification of the associated controller on page 6, paragraph 0056.
- 15. As per claims 9,22,27, Krishnamurthy et al. discloses automatically determining which controller of the redundant controllers is active controller, wherein outputs controlled by the redundant controllers are electrically connected together and provided as input to at least one device; monitoring the active controller for failure; and upon detection of failure, automatically switching active control to another controller of the redundant controllers, wherein the automatic switching of active control to the another controller of the redundant controllers is transparent to the at least one device on page 6, paragraph 0056.
- 16. As per claims 13,26, Krishnamurthy et al. discloses wherein the providing includes providing a watch dog timer for each controller of the redundant controllers and providing status of watch dog timer signals associated with each controller of the redundant controllers for use in facilitating the output interlock of the redundant controllers on page 6, paragraphs 0057,0059.

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17. As per claim 14, Krishnamurthy et al. discloses logic for automatically determining which controller of redundant controllers is active controller, wherein outputs of the redundant controllers are electrically connected together and provided as input to at least one device; and a hardware output interlock for the redundant controllers to ensure that output controlled by only the active controller is enabled as input to the at least one device on page 6, paragraph 0056.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yolanda L. Wilson whose telephone number is (571) 272-3653. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Examiner

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